IN THE CLAIMS:

Claim 1 (currently amended) A PCR primer set specific for *Leishmania donovani*, said primer set ~~being (1) a first~~ comprising a pair of oligonucleotides having the sequences given by ~~SEQ ID NO. 1, and SEQ ID NO. 2.~~ SEQ ID NO: 1 and SEQ ID NO: 2,

wherein the primer set is effective in a PCR assay for detecting the presence of ~~t~~ *Leishmania donovani* infection in samples derived from patients infected by leishmaniasis.

Claim 2 (currently amended) A PCR primer set as claimed in claim 1, wherein the primer set ~~is the first~~ consists of the pair of oligonucleotides.

Claim 3 (cancelled)

Claim 4 (cancelled)

Claim 5 (currently amended) A method of detecting the presence of *Leishmania donovani* in a sample from a patient suspected of being infected with leishmaniasis, said method comprising the steps of:

a) providing a sample from the patient suspected of being infected with *Leishmania donovani*,

b) isolating and purifying ~~the~~ nucleic acids from the sample,

c) forming a polymerase chain reaction solution containing at least a portion of nucleic acids from step (b), a PCR primer set consisting of SEQ ID NO: 1 and SEQ ID NO: 2 ~~SEQ ID Nos. 1 and 2~~, a mixture of nucleoside triphosphate monomers, and an enzyme *Taq* polymerase in a buffered solution,

d) carrying out a polymerase chain reaction on the PCR reaction solution to amplify any *Leishmania donovani*-specific nucleic acid; and

e) ~~analysing~~ analyzing the *Leishmania donovani*-specific nucleic acids obtained in the polymerase chain reaction using a gel-electrophoresis method and staining the resulting gel,

wherein the presence of a band at about 600bp is indicative of the presence of *Leishmania donovan* ~~*parasites*~~ parasites in the patient.

Claim 6 (original) A method as claimed in claim 5 wherein the sample is obtained from peripheral blood or skin lesions of the patient.

Claim 7 (currently amended) A method as claimed in claim 5 wherein the nucleic acids are treated with phenol chloroform and ethanol to isolate and purify them.

Claim 8 (original) A method as claimed in claim 5 wherein the primers are sensitive so as to detect even 10 *fg Leishmania* DNA diluted in 10 million fold excess of human DNA in PCR reactions.

Claim 9 (original) A method as claimed in claim 5 wherein the PCR reaction is performed in a thermal cycler overlaid with mineral oil.

Claim 10 (cancelled)

Claim 11 (cancelled)

Claim 12 (currently amended) A method as claimed in claim 5 wherein ~~steps of~~ step d comprises amplifying the *Leishmania donovani*-specific nucleic acid ~~comprises~~ by initial denaturation at 94°C for 2 min followed by 40 cycles of denaturation at 94°C for 1 min, annealing at 45°C for 1 min and extension at 72°C for 2 min, and wherein a final extension at 72°C is carried out for 3 min so that multiple copies of the *Leishmania donovani* specific nucleic acid are produced.

Claim 13 (currently amended) A kit for detecting *Leishmania donovani* in a sample, said kit comprising oligonucleotide primers, wherein the primers comprise ~~SEQ ID No. 1 and SEQ ID No 2~~ SEQ ID NO: 1 and SEQ ID NO: 2, and wherein the primers specifically hybridize to the ~~said~~ *Leishmania donovani*.